

# Creating a Culture of Physical Activity

The Move More Plan:

A framework for increasing physical activity in Sheffield 2015-2020.



“Lack of activity destroys the good condition of every human being while movement and methodical physical exercise save it and preserve it”

Plato

## Contents

i Preamble .....	7
ii Options for reading the Move More plan .....	7
iii Move More plan one-page summary.....	8
iv Move More pseudo-manifesto .....	9
1.0 A challenge to Move More.....	10
1.1 Vision.....	12
1.2 Mission .....	13
2.0 Physical activity .....	14
2.1 A quick definition of physical activity .....	14
2.2 Benefits of regular physical activity .....	14
2.3 How active are we currently? .....	15
2.3.1 Adults .....	15
2.3.2 Children and Young people.....	16
2.4 Sedentary behaviour across the lifespan.....	17
2.5 What works to promote physical activity? .....	17
3.0 Move More: a plan for changing culture .....	19
3.1 How has the plan been developed? .....	20
3.2 Our approach to moving more .....	20
4.0 What are our priorities for action? .....	21
4.1 Our six outcomes .....	21
Outcome 1: Empowered Communities.....	21
Outcome 2: Active Environments .....	21
Outcome 3: Active People & Families.....	21
Outcome 4: Physical activity as Medicine.....	22
Outcome 5: Active Schools and Active pupils.....	22

Outcome 6: Active Workplaces and an Active Workforce.....	22
4.2 12 Principles of the Move More plan.....	22
5.0 How will we achieve the outcomes? .....	24
5.1 Empowered Communities .....	24
Ambition 1: Create a Move More network.....	24
Ambition 2: Asset based community development training programme .....	25
Ambition 3: Support community-based innovation events.....	25
5.2 Active Environments .....	25
Ambition 1: Establish an innovation academy to implement best practice .....	26
Ambition 2: Pilot playing out programmes.....	26
Ambition 3: Improving community safety .....	26
Ambition 4: Routes to activity .....	26
5.3 Active People & Families.....	27
Ambition 1: Create a city-wide brand and associated standards of use for physical activity promotion .....	27
Ambition 2: Create a high quality digital hub for physical activity signposting and promotion.....	28
Ambition 3: Create an on-line physical activity finder.....	28
Ambition 4: Develop ‘free for all’ Move More marketing and advertising resources.....	28
Ambition 5: Develop a Move More city-wide challenge event .....	29
Ambition 6: Develop and deliver a Move More social marketing campaign.....	29
Ambition 7: Free physical activity for all.....	30
5.4 Physical activity as Medicine.....	30
Ambition 1: UK leading physical activity referral scheme .....	30
Ambition 2: Co-produced programme of training to outline the benefits of physical activity as medicine.....	30
Ambition 3: Centres for physical activity as medicine .....	31
Ambition 4: Teach people the skills to implement physical activity into their daily lives .....	31
5.5 Active Schools and Active pupils.....	31

Ambition 1: Implement whole of school approaches to physical activity .....	32
Ambition 2: Develop an Innovation Academy to review the current provision of physical activity for children.....	33
Ambition 3: Implement Junior parkrun in Sheffield .....	34
Ambition 4: Utilise school facilities to enhance places for community-based physical activity .....	34
Ambition 5: Develop an robust data driven picture of physical activity in children and young people .....	34
5.6 Active Workplaces and an Active Workforce.....	35
Ambition 1: Create a high quality digital hub for workplace physical activity promotion .....	35
Ambition 2: Establish a workforce innovation academy to implement best practice.....	36
Ambition 3: City-wide mass media workforce campaigns.....	36
Ambition 4: Wellness screening and behaviour change counselling.....	36
5.7 Two ‘must have’s’ .....	38
5.7.1 Resourced and co-ordinated approach .....	38
5.7.2 Robust data and evaluation .....	38
6.0 Why will this work in Sheffield?.....	39
7.0 Implementation of the Move More plan .....	40
Appendix 1.0 The importance of physical activity for health, wealth and wellbeing.....	41
Benefits of regular physical activity .....	41
Physical activity recommendations for children, adults & older adults .....	41
Appendix 2.0 Current prevalence of physical activity in the UK.....	44
Adult participation (19-64 years) in physical activity.....	44
Older adult (65+ years) participation in physical activity .....	45
Children and young people’s participation in physical activity .....	46
Sedentary behaviour across the lifespan.....	46
Appendix 3.0 The local context of the Move More plan .....	48
A snapshot of physical activity in Sheffield.....	48
Population and health indices .....	50

Appendix 4.0 What works in terms of physical activity intervention? .....	51
Interventions to promote physical activity .....	51
Informational approaches.....	51
Behavioural and social approaches .....	51
Environmental and policy approaches.....	51
Effectiveness of interventions to promote physical activity.....	52
Why a value-based approach?.....	53
Cost-effectiveness of physical activity interventions.....	53

## i Preamble

- The following document (the Move More plan) sets out a five year framework for the promotion of physical activity in Sheffield.
- Under the banner of 'Move More', the plan is owned by the Physical Activity and Food sub-group of the Health and Wellbeing Board and has been championed by the Olympic Legacy programme: The National Centre for Sport and Exercise Medicine in Sheffield.
- Move More is supported by all the major city partners, including; the Voluntary Sector, the NHS, both Universities, Sheffield City Council, Sheffield Chamber of Commerce, and Sheffield International Venues (SIV).
- The aim of the Move More plan is to provide the overall direction for increasing physical activity in Sheffield and to secure and align stakeholder commitment to that direction.
- Increasing physical activity at a population level requires the input of numerous organisations, sectors and champions, the Move More plan is therefore intended to be inclusive of, and integral to the strategic and implementation plans of these stakeholders.
- The Move More plan is split into distinct sections with the main body of the plan focusing on the Vision and Mission of Move More, the challenge of increasing physical activity at population level and the outcomes to be achieved through the application of this framework. The principles that underpin the framework and the proposed programmes of work (ambitions) that are designed to deliver the outcomes are also outlined.
- For the purposes of brevity, more detailed context, supporting evidence and rationale are provided in the appendices. Key references are provided as footnotes.
- A one page summary is provided in Section iii.
  
- For clarity – the term 'Physical Activity' as used here refers to all forms of bodily movement which raise heart rate and so help to improve mental and physical wellbeing.
- The Move More definition of physical activity therefore includes sport, more structured and organised exercise such as dancing, swimming and active recreation (e.g. attending at gym) as well as everyday activities like housework, gardening or walking/cycling as a mode of transport.

## ii Options for reading the Move More plan

- This is a sizeable document and it is unrealistic to expect all stakeholders to undertake the task of reading the whole plan.
- Therefore, with the intention of making it easier for the reader to find the information most important to them we propose 3 ways of reading the plan:
  1. If you just want the headlines read sections 1.0, 4.0 and 5.0
  2. For brief background on the development of the plan plus the outcomes, principles & key ambitions – read sections 1.0, 3.0, 4.0, and 5.0.
  3. I've got time, show me everything – read all sections in the order they appear plus the appendices.

### iii Move More plan one-page summary

#### Our six outcomes



##### Empowered Communities

Engaged and empowered communities who take responsibility and ownership of 'changing the way we do things round here' in terms of physical activity.



##### Active Environments

Sheffield is a city designed to make it easier for people to be physically active as they go about their daily lives.



##### Active People and Families

Citizens and communities are better informed, more connected, feel a greater sense of self-efficacy and move more as a normal part of daily life.



##### Activity as Medicine

Sheffield's healthcare system commissions, values and promotes physical activity as a viable treatment option.



##### Active Schools and Active Pupils

Sheffield children are provided with a positive experience of physical activity through the physical, social and educational environment of the school.



##### Active Workplaces and an Active Workforce

Places that create environments and policies, and provide support, to enable employees (and those seeking work) to move more as part of their working day to improve health and create wealth.

#### Our vision

Create a culture of physical activity.



#### Our mission

Ensure that everyone (individuals, families and communities) living in Sheffield has the opportunity, environment and human capital to be sufficiently physically active as part of their everyday life, to benefit their health and wealth.

"Changing the way we do things round here"

#### 12 Principles of the Move More Plan

##### Build from the bottom up –

Adopt an asset based community development approach.

##### Reduce inequality in participation –

In planning and prioritising of interventions, recognise that the largest health gain occurs for the first 15-29 minutes per day of activity by the least active.

##### Equal and inclusive approach –

Everyone should have accessible, safe, convenient and affordable choices for physical activity.

##### Connect people with physical activity –

Ensure physical activity opportunities are available and promoted across the life-course.

**Whole system approach** – Address the policy, environmental, social and individual factors and determinants of physical activity.

##### Make physical activity the easy choice –

Design Sheffield's spaces to promote opportunities for physical activity and reduce sedentary behaviour.

**Create a physical activity habit** – Recognise the importance of habit formation and the contextual nature of physical activity behaviour in the design of interventions.

##### Make it fun –

Encourage providers of physical activity to promote fun, enjoyment and autonomy, helping people to build it into their daily lives.

**Consistent communications** – About the benefits, opportunities and support available for physical activity choices in Sheffield.

**Make it visible** – Portray physical activity as a normal part of life, across the lifespan.

**Work together** – Recognise that no single organisation can effectively change the physical activity behaviour of the population alone.

**Evidence and Evaluation** – Ensure interventions are underpinned by best practice and the impact of service delivery is robustly evaluated using process, output and outcome frameworks.

move more

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#### iv Move More pseudo-manifesto

**Move More.** Connect people who Move More. Change the environment to promote moving. Reward effort. **Have Fun.** Monitor and feedback progress. Ask others how they Move. Encourage others to copy them. Find something people enjoy. **Focus on the times people do Move,** not the times they don't. Point out to people they can move more whilst reading, listening to music, talking with friends, **enjoying** solitude or social interaction. **Make it easy** to play Sport, walk to work, walk in work, walk home. **Look better, Feel better - that's the message.** Teach new skills. Re-visit old ones. **Come Meet people like you.** Meet people unlike you. Improve Health. Increase wealth. Create new activities - people might like it, they might not but at least we'll know. **Make moving more easy.** No time, encourage people to turn off the TV. **10-minutes more. Sit less** - 10 minutes less. **Stand up - enjoy the view.** Keep it simple. Teach people how to **Make a plan A and a plan B.** Explain that setbacks are normal, people are human. Let's start now not Monday. **Focus on what people value.** Family. Friends. Value and support role models - lots of them not just famous ones - **local ones are great too.** Help others. Seek help. **Save money.** Be kind to the Environment. Save the whales - what? **Ride Bikes.** Walk. Run. Dance. Grow something, reap something. **Do something - Move More.**

## 1.0 A challenge to Move More

- There is compelling and indisputable evidence that physical activity performed on a regular basis, is good for you, for us as a society, for our environment and our economy.
- It is well documented that physical activity can enhance and sustain our health, helping to prevent chronic diseases, such as cardiovascular disease, obesity and diabetes as well as enabling us to recover quicker if we do become ill.

*There is strong evidence that creating a culture of physical activity in Sheffield could lead to over 600 premature deaths being prevented each year<sup>1</sup>. That's friends, relatives, colleagues, neighbours and members of our communities in Sheffield sharing life together longer.*

- It is perhaps less well publicised that physical activity can also improve the educational attainment of our children, help to reduce anti-social behaviour, build self-esteem across the life-span, contribute to urban regeneration and help increase work productivity, quality of life and employment<sup>2</sup>
- A physically active society will also result in a major decline in loneliness and social isolation, along with a reduction in depression and poor psychological health.
- There will be significant per capita reductions in CO2 emissions and reduced congestion via active travel and a lower number of working age people on out of work benefits.
- Sounds great doesn't it!?
- There is of course a problem. The world we all live in doesn't make being physically active very easy; in fact, it's easier to move less than it is to move more.
- For example over the last 3 decades we (as a society) have become increasingly reliant on technology for tasks of daily living and our work and leisure choices, environments and opportunities predominantly promote sitting down.
- Sedentary forms of transport are a perceived necessity to enable us to lead our 'busy' and 'time restricted' lives and as a result the social and physical design of our schools, workplaces and communities has changed to accommodate these preferences.
- In sum, we have pretty much engineered physical activity out of daily life.
- Instead of being part of how we live, we have largely confined physical activity to a recreational past-time chosen by few and in the process created a plethora of actual and/or perceived barriers to participation (e.g. a perceived lack of time, cost, low confidence, limited opportunity and actual or perceived lack of safety).
- Consequently, opportunities to engage in physical activity across the lifespan are plagued with inequality and too often defined by socioeconomic position with the least active commonly the least well off.

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<sup>1</sup> Whitfield, Gillett, Holmes, & Ogden, (2006). Predicting the impact of population level risk reduction in cardio-vascular disease and stroke on acute hospital admission rates over a 5 year period—a pilot study. *Public Health*, **120** (12), 1140-1148

<sup>2</sup> See Bailey, Hillman, Arent, & Petitpas. (2013). Physical activity: an underestimated investment in human capital? *Journal of Physical Activity & Health*.

- The dominant position that physical inactivity currently assumes within our city means that the majority of society and particularly the least affluent are experiencing negative physical and emotional health with huge medical, psycho-social and economic consequences<sup>3</sup>.
- The physical activity of the new and emerging generations is particularly low resulting in disorders, once the reserve of adulthood, now common amongst our children and young people (i.e. type II diabetes).
- Inactive children become inactive adults perpetuating the cycle.
- This is unacceptable. A change in culture is required.
- In Sheffield we (city-stakeholders<sup>4</sup> under the banner of Move More) are committed to achieving this culture change and challenging the sedentary way of life.
- We want to help create a culture of physical activity which sees Sheffield become the most active city in the UK by 2020.
- We also want to, as one colleague put it, "change the way we do things around here" to reduce the inequality that exists in the city in terms of physical activity (largely defined by socioeconomic position).
- This is so everyone (individuals, families and communities) living in Sheffield irrespective of age, gender, ethnicity, geography or social gradient has the opportunity, the environment and the human capital to be sufficiently physically active as part of everyday life to be of benefit to their health and wealth.
- In the following pages we set-out what we believe is an appropriate framework for the start of this culture change programme.

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<sup>3</sup> see Lee, Shiroma, Lobelo, Puska, Blair, Katzmarzyk. (2012). Effect of physical inactivity on major non communicable diseases worldwide: an analysis of burden of disease and life expectancy. Lancet. [http://dx.doi.org/10.1016/S0140-6736\(12\)61031-9](http://dx.doi.org/10.1016/S0140-6736(12)61031-9)

<sup>4</sup> Move More is supported by all the major City partners, including; the Voluntary Sector, the NHS, both Universities, the Local Authority, Sheffield Chamber of Commerce, and Sheffield International Venues (SIV).

## 1.1 Vision

**To create a culture of physical activity  
resulting in Sheffield becoming the most  
active city in the UK by 2020<sup>5</sup>**

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<sup>5</sup> Assessed using routinely collected data (i.e. Public Health Outcome Framework data, Active Peoples Survey; Health Survey for England) but also via a Sheffield specific database, including objectively assessed physical activity, across the lifespan.

## 1.2 Mission

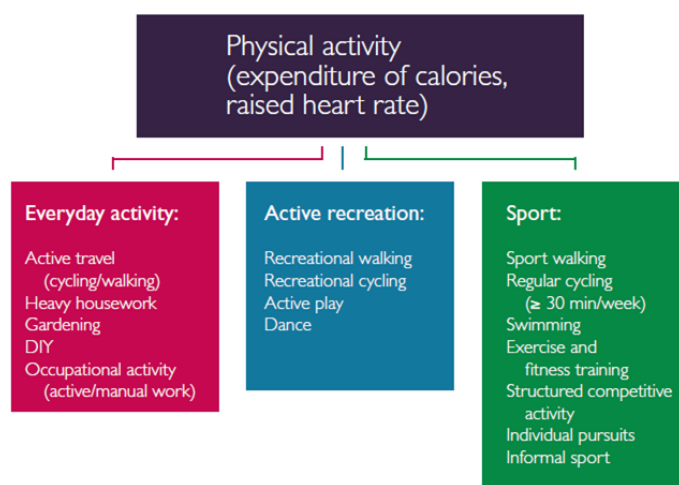
**To change the way we do things around here to *make it easier for Sheffield residents to be physically active as part of everyday life*. This will mean that everyone living in Sheffield has the opportunity, environment and human capital to be sufficiently physically active to benefit their health and wealth.**

## 2.0 Physical activity

### 2.1 A quick definition of physical activity

- Physical activity includes any form of movement which raises heart rate and so helps to improve mental and physical wellbeing (see figure 1.0).
- It includes everyday activities like housework, gardening, walking or cycling as a mode of transport, being active at work as well as families playing together.
- Physical activity also includes more structured and organised activities (often termed exercise) such as dancing, swimming and active recreation (e.g. attending at gym). It also includes individual and team sports whether competitive or not.
- Moderate physical activity is that which causes an individual to feel slightly warm, breathe slightly heavier and increases the heart rate. Typically people are still able to have a conversation whilst engaging in moderate intensity physical activity.
- Vigorous physical activity is that which requires us to breathe very hard, have a rapid heartbeat and often be short of breath. People cannot carry on a conversation whilst doing vigorous intensity physical activity.

Figure 1.0 What counts as physical activity?



### 2.2 Benefits of regular physical activity

- Physical activity, performed on a regular basis, is associated with significant positive physical and mental health benefits across the lifespan<sup>6</sup>.
- Physical activity plays an important role in the prevention of various chronic diseases, such as cardiovascular disease, ischemic stroke, hypertension, obesity, diabetes mellitus, osteoporosis, colon cancers and fall-related injuries.

<sup>6</sup> See O'Donovan et al., (2010). The ABC of Physical Activity for Health: a consensus statement from the British Association of Sport and Exercise Sciences. *Journal of Sports Science*, 28:573-591.

- Physically active men and women of all ages, socioeconomic groups, and ethnicities are happier, healthier and more productive compared to sedentary peers.
- There are also numerous protective and beneficial effects of an active lifestyle for older and younger people respectively as well as wider benefits to society (see appendix 1.0).
- Physical activity can also help to save money, improve the physical (reduced congestion and pollution via active travel) and social (reduced anti-social and criminal behaviour) environment we live in and help to ease the burden of chronic disease on the health and social care services.
- Reducing the burden of physical inactivity is critical given that it costs the NHS £1.1billion per annum with the wider costs to society and the economy approximately £8.2billion per year<sup>7</sup>.

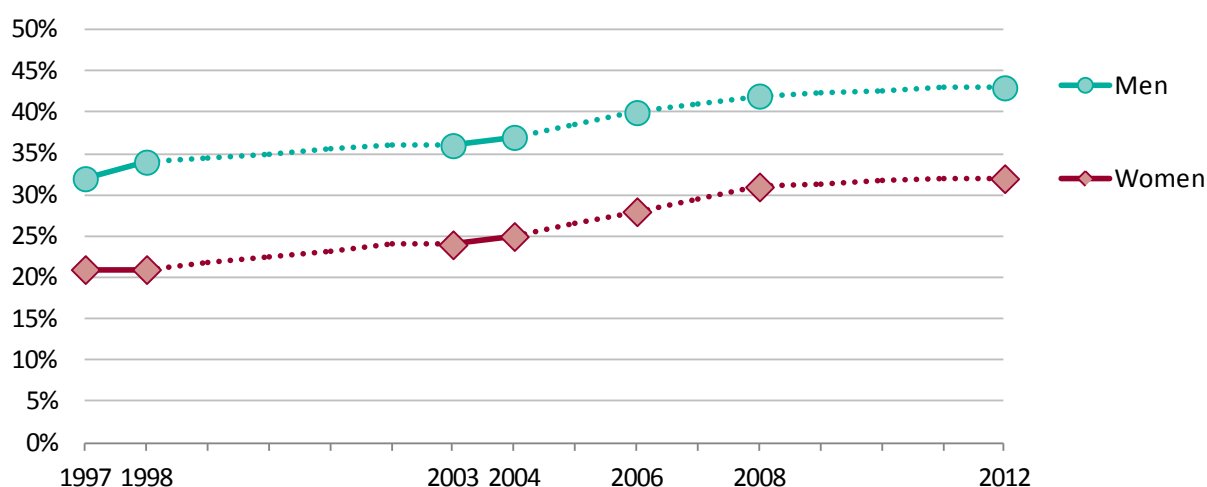
### 2.3 How active are we currently?

- Appendix 2.0 provides a fuller consideration of the current physical activity behaviour of the UK, with a look at Sheffield presented in appendix 3.0.
- The following section presents the headlines from this review.

#### 2.3.1 Adults

- Over the past two decades the prevalence of physical activity in England at recommended levels<sup>8</sup> has been low, albeit steadily increasing. This is shown in Figure 2.0.

**Figure 2.0 Trend in the proportion meeting previous physical activity recommendations (at least moderate intensity activity) by age and sex.** *Source: Health Survey for England 2012<sup>9</sup>*



- In 2009, a cohort study using objective measures of physical activity suggested that only 6% of men and 4% of women were sufficiently active to be of benefit to their health (NHS Information Centre for Health and Social Care, 2009) raising significant concern about a) the true picture of physical activity behaviour in the UK and b) the reliability of the available self-report data.

<sup>7</sup> See Allender et al., 2007 and Department of Culture, Media and Sports, 2002.

<sup>8</sup> Achieving at least 30 minutes per day of moderate intensity physical activity at least 5 times per week.

<sup>9</sup> Thanks to Cavill associates for the use of the Figures 2.0 & 3.0.

- The same trend has been observed in Sheffield with equally low participation.
- In 2011, the physical activity guidelines were updated.
- Adults (19-64 years) and older adults (65+) are now recommended to be active daily and to try and accrue at least 150 minutes of moderate intensity activity per week - in bouts of 10 minutes or more<sup>10</sup>.
- Using a different measure of physical activity that reflects the change in policy (such that comparisons should not be made with the previous data presented in Figure 2.0) the Health Survey for England (HSE, 2012) reported 67% of men and 55% of women met the current guidelines (150 minutes per week).
- In 2013, the Active Peoples Survey 7 (predominantly a measure of sport participation), found similar levels of participation with 56% of adults meeting the new guidelines.
- Sheffield reported 54.6% of adults meeting the 150minutes per week target.
- What is clear is that changing the threshold for physical activity has certainly increased the self-reported prevalence, perhaps making it easier for people to achieve the guidelines, but this change in measurement appears to be having little impact on the burden of chronic disease. Moreover, this data is still based on self-report and it is widely accepted that objectively assessed physical activity is likely to present a much lower prevalence.
- Equally, over 30% of the population in Sheffield are not achieving even 30 minutes of physical activity per week with clear inequalities remaining in terms of participation with the least active also the least affluent.

### 2.3.2 Children and Young people

- All children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and preferably up to several hours every day.
- The stark reality is that in 2012 only 21% boys and 16% girls aged 5-15 were classified as meeting current guidelines.
- Worryingly, this represents a marked decrease compared to 2008 data which reported 28% of boys and 19% of girls meeting the target.
- The proportion of children (boys and girls) meeting guidelines also reduces with age.
- That said, at least 90% of children were reported to have taken part in some physical activity in the last week, with 50% physically active for at least seven hours in the last week.
- Active travel to/from school, time being active during breaks at school, and formal PE lessons at school have remained relatively stable but low and so efforts must be made to change the physical activity habits of children within and outside the school environment.
- The picture in the early years is also worrying with only 9% of pre-school boys (aged 2-4) and 10% of pre school girls classified as meeting the current guidelines (i.e. for children under 5 of at least three hours of physical activity per day).
- Creating a physical activity habit from birth is essential.

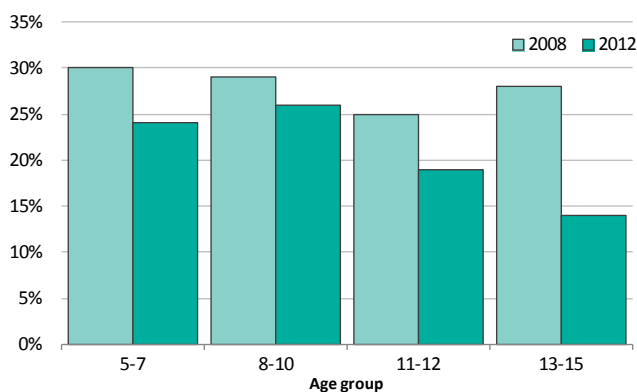
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<sup>10</sup> See Start Active, Stay Active - Department of Health, 2011

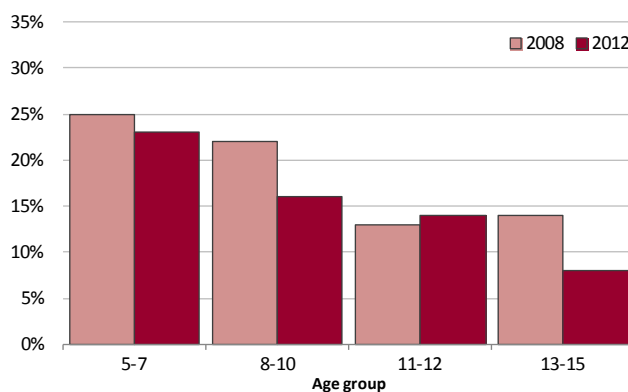


**Figure 3.0 Proportion of children aged 5-15 meeting physical activity recommendations 2008 and 2012 by age and sex.** *Source: Health Survey for England*

### BOYS



### GIRLS



## 2.4 Sedentary behaviour across the lifespan

- Current UK guidelines recommend that individuals across the lifespan should minimise the amount of time spent being sedentary for extended periods.
- According to HSE 2012 data, 31% men and 29% women spend an average of six or more hours of total sedentary time on weekdays with that figure increasing at weekends (40% and 35% respectively).
- In children, the average total sedentary time (excluding time at school) during weekdays was 3.3 hours per day for boys and 3.2 hours for girls. On weekend days this increased to 4.2 hours and 4.0 hours respectively.
- Perhaps most worryingly, the proportion of children who spend six or more hours being sedentary increases steadily with age as does the average time per day spent watching TV.
- The reduction of sedentary behaviour is equally a priority across the lifespan.

## 2.5 What works to promote physical activity?

- The key messages pertaining to 'what works' for promoting physical activity are presented here. The reader is directed to appendix 4.0 for a more comprehensive summary of the evidence base.
- Over the past decade the literature evidencing the promotion of physical activity, particularly in adults, has grown exponentially.
- Whilst interventions vary in terms of quality and design, with a fairly limited picture in terms of 'what works' at a population level<sup>11</sup>, there are some common approaches emerging. These include:
  - Social marketing through local mass media (television, radio, newspaper).

<sup>11</sup> See Baker et al., 2011 Community wide interventions for increasing physical activity. Cochrane. 13;(4):CD008366

- Other communication strategies (posters, flyers, information booklets, web sites, maps) to raise awareness and provide specific information to individuals in the community.
- Individual counselling by health professionals (both publicly and privately funded), such as the use of physical activity prescriptions.
- Working with voluntary, government, and non-government organisations, including sporting clubs, to encourage participation in walking, cycling, other sporting activities, and events.
- Working within specific settings such as schools, workplaces, aged care centres, community centres, homeless shelters, and shopping centres. This includes settings that provide an opportunity to reach disadvantaged groups.
- Environmental change strategies such as creation of walking trails and infrastructure with legislative, fiscal, policy requirements and planning (having ecological validity) for the broader population.
- What is also known via previous NICE evidence reviews<sup>12</sup> is that whilst short term changes in physical activity might be achievable, long term change (represented by maintained physical activity participation) and at a population level is much more difficult to achieve, particularly in those considered least active.
- A recent publication from the WHO (2011) outlines what it calls 'the best investments for physical activity'. The full report can be accessed here:  
<http://www.globalpa.org.uk/pdf/investments-work.pdf>
- WHO suggests the following 7 programmes should be considered to increase physical activity on a population level:
  1. Whole of school programmes
  2. Transport policies and systems that promote walking, cycling and public transport
  3. Urban design regulations and infrastructure that provide for equitable and safe access for recreational physical activity, and recreational and transport related walking and cycling across the life course
  4. Public education, including mass media to raise awareness and change social norms on physical activity
  5. Physical activity and NCD programmes integrated into primary health care systems
  6. Community-wide programmes involving multiple settings and sectors and that mobilise and integrate community engagement and resources
  7. Sports systems and programmes that promote 'sport-for-all' and encourage participation across the lifespan.
- Many of these multi-component approaches are also championed in a recent publication from the American College of Sports Medicine, the International Council for Sport Science and Physical Education and Nike, Inc. (see [www.designedtomove.org](http://www.designedtomove.org)).

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<sup>12</sup> See Hillsdon et al., (2005). Effectiveness of public health interventions for increasing physical activity. NICE; Foster & Cavill. (2009). Expert testimony – the effectiveness of physical activity promotion interventions. Report submitted to NICE CVD PDG Committee.

- Although many of the interventions outlined above have been tested in isolation, few population-based programmes have considered/delivered them concurrently (Kahn et al., 2002).
- In light of the Advocacy Council of the International Society for Physical Activity and Health (2011), confirming that no single solution to increasing physical activity exists, multi-component and concurrent interventions are therefore required.
- Indeed, a further WHO publication on 'what works' for physical activity (2009) suggested that multi-component interventions that are adapted to the local context, that use the existing social structures of a community and involve participants in the planning and implementation stages of the intervention represent the most effective option.
- Therefore, using whole systems approaches (an approach that considers all age groups and socio-demographics within the City) that combine multilayer interventions concurrently and importantly consider an individual's values as well as their apparent need for physical activity should be the focus for any attempt to elicit a significant shift in participation.
- This is the evidence base upon which the Move More plan has been developed.

### 3.0 Move More: a plan for changing culture

- The Move More plan is the framework upon which a culture of physical activity can be created within the communities, schools, workplaces and residents of Sheffield.
- The ultimate aim of the Move More plan is for Sheffield to become the most active City<sup>13</sup> in the UK by 2020 and as a result see meaningful improvement in the health, wellbeing and quality of life of individuals, families and communities living in Sheffield.
- Taking into account current and emerging trends in physical activity behaviour, the Move More plan provides a 5 year overall direction and a rationale for investment in increasing opportunities and stimulating a demand to be physical activity from a number of sectors (e.g. planning, transport, health, sport and education) and in a number of contexts (e.g. schools, workplaces, active travel, recreation).
- Recognising that no single organisation can effectively change the physical activity behaviour of the population alone, the Move More plan is intended to be inclusive and integral to the plans of others that influence the physical activity of the population of Sheffield.
- The Move More plan also reflects the aims and ambitions of a range of national and regional plans and strategies.
- Whilst the Move More plan identifies key themes of work (ambitions), which in some instances present options for service delivery, outlining operational plans for the delivery of these services is beyond the scope of this plan. As such, there is no mention of delivery costs, operational management processes and likely investment.
- Instead, it is assumed that these more detailed discussions will take place upon acceptance and sign-off of the principles and overall direction outlined herein.

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<sup>13</sup> Assessed using routinely collected data (i.e. Public Health Outcome Framework data, Active Peoples Survey; Health Survey for England) but also via a Sheffield specific database, including objectively assessed physical activity, across the lifespan.

- Moreover, one of the underpinning principles of the Move More plan is to build physical activity in communities from the bottom up and so a flexible approach is required to the design and delivery of services.

### 3.1 How has the plan been developed?

- The Move More plan has been co-produced through consultation with over 300 individuals representing over 100 different organisations in Sheffield.
- The most significant consultation took place on 6th November 2013 where people across Sheffield were invited to contribute to the development of the plan at an event at the City Hall.
- Comprising over 60 organisations, a total of 132 individuals attended the event during which they asset mapped physical activity, shared ambitions and action planned about how to challenge the inactivity culture prevalent within our society.
- The ideas generated from that event were then reviewed using simple content analysis and key themes identified.
- In addition, a pre-event questionnaire was designed and circulated across city-networks with open access to gain further insight and to help shape the Move More plan.
- In the writing of the plan, this stakeholder consultation has been combined with extensive review of the latest evidence emerging from the research community as well as considering previous and current physical activity strategies available locally, nationally and internationally.
- The result is a framework that is grounded in the views, experience and commitment of physical activity champions across the City as well as what works from evidence regionally, nationally and internationally.
- That said, whilst we are confident that our stakeholders have a good understanding of the needs of the communities that they represent, there has been little direct engagement with the people of Sheffield themselves in the development of this document. This is something that we will seek to redress over the lifetime of the Move More plan.

### 3.2 Our approach to moving more

- The Move More plan will take a bottom-up, value-based, whole systems approach (an approach that considers all age groups and socio-demographics within the City) to creating a culture of physical activity within Sheffield.
- In accordance with best practice and research evidence (i.e. NICE guidance on physical activity PH8, PH13, PH17, PH25, PH41, PH44, PH47 and PH49; WHO 2011 - Investments that work for physical activity) our approach is underpinned by a socio-ecological model<sup>14</sup> for physical activity promotion.
- This model suggests a need to consider the broad range of variables known to influence physical activity concurrently (i.e. intrapersonal, cultural, organisational, physical environmental, and policy).
- The plan also recognises that a large proportion (30%) of the population in Sheffield currently participates in less than 30 minutes of physical activity per week against a target of 150minutes and that the greatest health gain can be accrued by activating the least active.

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<sup>14</sup> See Sallis et al., (2006). An ecological approach to creating active living communities. Annual Review of Public Health. 27:297–322.

- Moreover, inequalities exist in terms of physical activity participation between the least and the most affluent areas of the city which need re-dressing.
- With this in mind it is a specific intention of the Move More plan to ensure that everyone, regardless of age, gender, language, ethnicity, economic status or ability, should have accessible, safe, convenient and affordable choices for physical activity.
- Therefore any intervention programmes must be designed to be accessible for all.
- Achieving a change in culture will also require courageous and committed leadership, a resourced and co-ordinated approach from partners and the communication of consistent messages about physical activity but ultimately, the success of this plan will depend on whether or not the people, families and communities of Sheffield are up for it. This is why we are placing a large emphasis on asset based community development in our approach.
- We believe that releasing the resources within people, networks, associations and supporting services and institutions of Sheffield will be enough to ensure that Sheffield 'moves more' than any other city by 2020.

## 4.0 What are our priorities for action?

- The Move More plan identifies 6 priority areas for action (our outcomes) which aim to re-engineer physical activity back into daily life with a specific focus on four key contexts; schools, communities, workplaces and healthcare.
- These outcomes are supported by 12 guiding principles (our enablers) that come together as a framework to provide direction and influence investment in physical activity promotion across Sheffield.
- Whilst specific ambitions to change culture (i.e. proposed programmes of work) are outlined herein, it is essential that physical activity in communities is built from the bottom up and so a flexible approach is required to the design and delivery of services.

### 4.1 Our six outcomes

- As city-stakeholders we have identified 6 key outcomes that represent what we want to achieve through the Move More plan. These aims are aligned with the Health and Wellbeing Board in terms of improving population health. They are:

#### Outcome 1: Empowered Communities

Engaged and empowered communities who take responsibility and ownership of 'changing the way we do things round here' in terms of physical activity

#### Outcome 2: Active Environments

Sheffield is a city designed to make it easier for people to be physically active as they go about their daily lives.

#### Outcome 3: Active People & Families

Citizens and communities are better informed, more connected, feel a greater sense of self-efficacy and move more as a normal part of daily life.

#### Outcome 4: Physical activity as Medicine

Sheffield's healthcare system commissions, values and promotes physical activity as a viable treatment option.

#### Outcome 5: Active Schools and Active pupils

Sheffield children are provided with a positive experience of physical activity through the physical, social and educational environment of the school.

#### Outcome 6: Active Workplaces and an Active Workforce

Places that create environments and policies, and provide support, to enable employees (and those seeking work) to move more as part of their working day to improve health and create wealth.

- These outcomes will be assessed using routinely collected data (i.e. Public Health Outcome Framework data, Active Peoples Survey; Health Survey for England) but also via a Sheffield specific database, including objectively assessed physical activity, across the lifespan.

### 4.2 12 Principles of the Move More plan

- Through our stakeholder consultation and desk-top research that have informed the writing of this plan, 12 guiding principles have been developed that will be used by the Move More board to shape and test investment for physical activity over the next 5 years.
- It is envisaged that these principles will also be used by partners across the city in the consideration of any plans to provide services or design spaces that have an influence on the physical activity of the population and or specific groups within the population.
- The 12 principles are as follows:
  1. **Build from the bottom up** - adopt asset based community development values and processes in the promotion of physical activity.
  2. **Reduce inequality in participation** - In planning and prioritising of interventions, recognise that the largest health gain occurs for the first 15–29 min per day of activity by the least active<sup>15</sup>.
  3. **Develop an equal & inclusive approach** - This means that everyone, regardless of age, gender, language, ethnicity, economic status or ability, should have accessible, safe, convenient and affordable choices for physical activity.
  4. **Connect people with physical activity** – Ensure physical activity opportunities are available and promoted across the life-course by addressing the needs of and promoting activity for children, families, adults and older adults in specific contexts (e.g. workplaces, schools, communities, parks and green spaces).

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<sup>15</sup> See Woodcock, Franco, Orsini, & Roberts, (2011). Non-vigorous physical activity and all-cause mortality: systematic review and meta-analysis of cohort studies. *International Journal of Epidemiology* 40: 121–38.

5. **Whole-system approach** - Address the policy, environmental, social and individual correlates (factors associated with physical activity) and determinants (those with a causal relationship) of physical activity concurrently in interventions.
6. **Make physical activity the easy choice** - Design and orientate Sheffield's spaces to promote opportunities for physical activity and to reduce sedentary behaviour thereby making the physically active choice the easy choice.
7. **Create a physical activity habit** - Recognise the importance of the habit formation process and the contextual nature of physical activity behaviour in the design of interventions (i.e. it is often assumed that people make rational lifestyle decisions whereas, in reality, many such decisions are actually irrational, using unreasoned shortcuts or habits instead of logic<sup>16</sup>).
8. **Make it fun** - Providers of physical activity should seek to promote fun, enjoyment, mastery and autonomy and help people to build physical activity into their daily lives.
9. **Consistent communication** - Communicate consistent messages about the benefits, opportunities and support available for physical activity in Sheffield using Move More as the wrap around brand.
10. **Make it visible** - The participation in physical activity (in different contexts) of people from across the lifespan should be promoted widely and often so that physical activity is seen as a normal part of life.
11. **Work together** - No single organisation can effectively change the physical activity behaviour of the population alone and therefore working in partnership with numerous organisations across a broad range of sectors is essential.
12. **Evidence and Evaluation** - Ensure interventions are underpinned by best practice and the impact of service delivery is robustly evaluated using process, output and outcome frameworks.

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<sup>16</sup> See Matheson et al., (2013). Prevention and management of non-communicable disease: the IOC consensus statement, Lausanne. *British Journal of Sports Medicine*. 47:1003-1011

## 5.0 How will we achieve the outcomes?

- The following section provides headline information on our ambitions (i.e. proposed programmes of work) to deliver a culture change in physical activity.
- Extended rationale will be provided in the delivery plans for each outcome which are to be co-produced over the next few months.
- Importantly, the delivery plans will also identify outcome measures and a clear process, output and outcome framework for evaluation.
- Needless to say, all our ambitions are underpinned by our 12 Move More principles as well as best practice and evidence locally, nationally and internationally.
- To achieve our ambitions will require input from and connection with multiple stakeholders from many sectors including; health, urban planners, local government, the transport sector, environmental protection agencies, sporting organisations and clubs, criminal justice organisations, community organisations and special interest groups.

### 5.1 Empowered Communities

Aim: Engaged and empowered communities who take responsibility and ownership of 'changing the way we do things round here' in terms of physical activity.

Objectives:

1. To identify and connect physical activity champions working and living in Sheffield to create a community of Move More ambassadors.
2. To up-skill Move More ambassadors in asset based community development approaches.
3. To support, value and recognise the contribution of the Move More ambassadors to the culture change programme.
4. Facilitate the co-production of physical activity intervention in communities through the Move More ambassadors.

#### Ambition 1: Create a Move More network

- The first stage of creating empowered communities is to connect the people who are already on message and/or already support people into physical activity in daily life.
- For the purposes of this plan, we are calling this group of people 'Move More ambassadors' and the proposal is to connect them digitally (via the Move More on-line hub – see Outcome 3) and via face-to-face events to establish a 'Move More network' across Sheffield.
- Once established, the Move More network will provide real opportunity to:
  - a) Listen to the needs of the population that we are trying to reach,
  - b) Enhance and refine current physical activity delivery to meet these needs,
  - c) Identify road blocks and potential pinch points in terms of physical activity provision and behaviour,
  - d) Find the bright spots of activity in terms of what people are doing that is working,
  - e) Define and refine the help and support people need, and importantly find ways to provide it through the network,



f) Communicate the aims, benefits and programmes of Move More across the city.

- The Move More network will also provide a facility for stakeholders across the city to input into the evidence and knowledge-based design of initiatives within this and future Move More plans as well as enabling them to continue to share knowledge and consider any appropriate service redesign.
- This will also ensure equal contribution in co-designing the Move More Plan.
- Whilst we are aiming for a city-wide approach with the Move More plan, we also recognise that environmental and individual behaviour change will be harder amongst certain groups and in specific places (e.g. the least active).
- It is envisaged that the Move More network will provide intelligence to help us direct resources in an equitable manner, and target extra effort to those with greater need.

**Ambition 2: Asset based community development training programme**

- Fundamental to our approach to moving more is to build physical activity promotion from the bottom-up. This will mean embedding the principles of asset based community development within the strategic and delivery fabric of the city.
- With this in mind a key Ambition will be to train Move More ambassadors in the asset based community development approach and in doing so embed key skills at pace and scale into the design and delivery of physical activity interventions within Sheffield communities.

**Ambition 3: Support community-based innovation events**

- The co-production of community owned physical activity intervention will require some facilitation and support. The Move More plan will identify resource (i.e. people and places) to support this co-production through a series of community based innovation events.
- Each of these events will have a specific contextual, geographical or socio-demographic theme and will be owned and driven by Move More ambassadors.

## 5.2 Active Environments

**Aim:** Sheffield becomes a place designed to make it easier for people to move more. This will mean designing a built and natural environment that provides varied and easily accessible opportunities for physical activity and promotes habitual movement through the daily living of residents.

**Objectives:**

1. Ensure that transport systems within and surrounding the city (e.g. Peak District) support active travel by providing safe, well sign-posted and affordable routes to workplaces, schools and community facilities and services.
2. Ensure parks and public open spaces are safe, accessible, multi-functional and part of an active travel/transportation network that connects key destinations (e.g. schools, workplaces, community facilities).
3. Design and re-orientate buildings so that they promote opportunities for active living and at the same time reduce sedentary behaviour (e.g. enhancing signage to the stairs and improving the quality of stair-well environments).

### Ambition 1: Establish an innovation academy to implement best practice

- Explore the potential of establishing an 'Innovation Academy' (a multi-agency working group) to connect key stakeholders across the city that influence policy and delivery decisions affecting physical activity in the built and natural environment in Sheffield.
- It is proposed that the Innovation Academy would be responsible for:
  - a) Facilitating the implementation of NICE guidance on promoting physical activity in the environment (PH8) across city stakeholders.
  - b) Facilitating the implementation of best practice in other contexts such as schools and the workplaces (see Outcomes 5 and 6) in terms of active travel.
  - c) Developing a programme of work to review and replace cues from the physical and social environment that re-enforce the message that physical activity is not important. For example; cycle paths that are not connected, not sufficiently wide or give way to motorists unnecessarily OR streets that are littered with 'no ball game' signs or city centres designed around car access rather than active travel access (i.e. lots of car parks and no safe cycle storage or changing facilities).
  - d) Explore the viability of developing a physical activity rating for city spaces based on accessibility, safety, quality of services.
- Either as part of or separate to the Innovation Academy the feasibility of a city-wide policy officer (part-time and embedded within one of the Move More stakeholder organisations) is to be considered who would have the role of implementing global models of best practice (Finland, Netherlands and Western Australia) and influencing policies across organisations and sectors that promote physical activity in the built and natural environment for older adults, adults, people with disabilities, children and young people.

### Ambition 2: Pilot playing out programmes

- Pilot a 'playing-out' programme using Move More ambassadors (see Outcome 1) across Sheffield (see [www.playingout.net](http://www.playingout.net)).

### Ambition 3: Improving community safety

- To scope out a programme of work to improve community safety.
- This should build on current work within Sheffield that focuses on improving the actual and perceived safety around areas of physical activity opportunity within communities (e.g. green spaces, streets).
- This would include a focus on City hot-spots, schools and community streets using 'community audit' work to inform our approach.
- The philosophy of this programme is built on the idea of 're-claiming the streets and green spaces for physical activity and play'.

### Ambition 4: Routes to activity

- As part of an environmental approach to increasing physical activity the 'cycle-ability' and 'walk-ability' of Sheffield will be improved via a programme of investment under the proposed banner 'Routes to Activity'.

- This programme, which would be in partnership with the LSTF and SCC town planning and active travel officers – would see a focused investment in routes to schools, routes to leisure, routes to the Peak District and routes to the City that promote physical activity through active travel.
- As well as capital investment in improving the quality of cycle lanes, footpaths and active travel hubs (places that provide changing and storage facilities), this programme would also focus on providing a supportive social environment for active travel including bike hire, bike servicing, rider confidence and skills training, route mapping apps and mass participation events such as Sky ride.
- Importantly here, these ‘Routes to Activity’ would be promoted through the physical activity online hub, social marketing campaigns (barriers to activity) and programmes of tailored support in our key contexts of communities, schools, workplaces and healthcare.

### 5.3 Active People & Families

Aim: Physical activity is a normal part of daily life for people living in Sheffield whether that’s through shopping, the commute, active recreation, playing sport or tasks of daily living.

- To be successful in our aim for Sheffield to be the most activity city in the UK by 2020 we need to create a population who seek out opportunities to be active as part of their daily lives.
- This will mean changing attitudes, enhancing knowledge and skills, building confidence, reducing barriers and providing support.
- It will also mean signposting, supporting and connecting people & families with opportunities to be active within the city - of which there are many (evidenced through the asset mapping undertaken at the Move More consultation event).

Objectives:

1. Connect people & families with physical activity opportunities across the lifespan
2. Have a positive impact on the least active across the lifespan in Sheffield
3. Market clear, consistent, simple and value-based messages for physical activity
4. Connect with key strategy and delivery groups who are tasked with implementing change in specific communities across the life-course in Sheffield (e.g. aging better, within reach, Sheffield Mind).

#### Ambition 1: Create a city-wide brand and associated standards of use for physical activity promotion

- The key principle underpinning this ambition is to establish a single identity within Sheffield for physical activity that can be adopted, explored and used by all stakeholders (providers and commissioners) so that consistent and co-ordinated messages reach the population of Sheffield regarding physical activity.
- Furthermore, one brand will help connect large scale events and link together the Move More network. This will in turn create a sense of a growing social norm around physical activity in the city.
- To facilitate this we will utilise the brand of Move More and develop a set of standards/expectations of association with the brand (which will be kept simple as we want wide uptake)

that will bring kudos to delivery partners and a connectedness across stakeholders in terms of co-ordinated physical activity promotion.

- To achieve this a Move More marketing & public relations team will be formed, that makes best use of technology and channels of communication to:
  - Help grow, connect and manage the Move More network
  - Create consistent, clear and simple messages about physical activity that are value based
  - Promote all activity in the city that supports the Vision of Move More
  - Maximise exposure of the Move More brand.

#### Ambition 2: Create a high quality digital hub for physical activity signposting and promotion

- The development of an on-line hub to promote and signpost physical activity is a key ambition of the Move More plan.
- Providing high quality and immediate access to written information, videos, testimonies and case studies as well as online training programmes, challenges and signposting to physical activity opportunities within the city is much needed.
- The Move More hub would also help facilitate people & families making plans to be active, help relapse prevention through evidence based strategies and provide access to contact with professional support within the city via the potential for self-referral to city-wide schemes.
- The hub would also link to existing high quality websites across Sheffield as well as national and international websites demonstrating examples of good practice.
- The on-line hub will also be central to supporting the Move More network and will therefore have ongoing management resource requirements.

#### Ambition 3: Create an on-line physical activity finder

- As part of the Move More digital hub an 'activity finder' will be created that signposts individuals and communities to all physical activity opportunities available in the city.
- It will be essential that that this activity finder links to existing information databases (e.g. Get Hooked on Life, Sheffielder, Activity Sheffield, SIV, Ask Sid, Help yourself, Sheffield Information Service) to ensure good coverage and efficiency in updates.

#### Ambition 4: Develop 'free for all' Move More marketing and advertising resources

- It is essential to make it easy for stakeholders and partners to adopt the Move More brand as part of their own marketing and advertising activities.
- For this to happen there needs to be some clear benefits for users and stakeholders.
- With this in mind, part of the physical activity hub will include a suite of marketing and promotion resources for Move More ambassadors and stakeholders to use within their own physical activity delivery, marketing and advertising.
- It will be important that these resources are high quality, simple to use and provide low cost print options with subtle Move More branding, allowing space for the provider to take centre stage.
- It will also be critical that we generate a sense amongst stakeholders, partners and the general public that the Move More branding signifies programmes that are high quality and high impact.

- That is not to say that we will 'police' delivery agencies as this will lead to exclusion and we want to be inclusive with this message but it will help to create a sense of togetherness and ownership of the physical activity agenda in Sheffield which will be essential in transforming the culture.

#### Ambition 5: Develop a Move More city-wide challenge event

- One of the key challenges in the promotion of physical activity on a population level is engagement and ownership.
- Whilst community focused programmes can have a positive impact on physical activity this impact and engagement is mostly confined to specific a targeted group(s).
- Through Move More we are keen to explore the potential of engaging the whole population in a mass participation event - termed the 'Move More Challenge' - which not only acts as a tool to promote physical activity but can also be used to enhance the baseline picture we currently have about levels of physical activity across the city.
- The Move More challenge will need to be inclusive and ensure that clear exit routes into participation are established and actively promoted.
- The Move More challenge will also present a platform for sponsorship as well as helping to grow the Move More network, raise profile of physical activity in the city and develop future opportunities for inter-city competitions (regional, national or international).

#### Ambition 6: Develop and deliver a Move More social marketing campaign

- The feasibility of a dedicated print, radio and social networking media (e.g. facebook & twitter) campaign will be explored to promote physical activity across Sheffield using the Move More brand.
- The messages within this campaign would be co-produced through the Move More network and community innovation events (see Outcome 1) and have a positive focus as opposed to messages of activity for ill health avoidance and be value-driven.
- A number of discrete campaigns could run alongside this broader campaign that focus on breaking down the macro, micro and individual level barriers known to limit physical activity participation (see Cavill et al 2004 systematic review of European Physical Activity interventions) which would also be co-produced through the Move More network.
  - a) Macro - challenging perceived convenience of facilities for walking (pavements, trails), accessibility of destinations (shops, parks), and perceptions about traffic and busy roads.
  - b) Micro - community level and targeted approaches which simplify the message about physical activity.
  - c) Individual - perception of lack of time; perception that one is not "the sporty type" (particularly for women & girls); concerns about personal safety; feeling too tired or preferring to rest and relax in spare time; and self-perceptions (for example, assuming that one is already active enough).
- As part of any social marketing campaign the use of Move More signage promoting Sheffield as 'The City of Physical Activity' at all entry points to the City via rail, road and so on should be explored to enhance the visibility of physical activity in the city.

#### Ambition 7: Free physical activity for all

- It is also proposed that the model of free physical activity provision is explored.
- This notion is based on recent UK evidence from Birmingham and Blackburn that removing the cost barrier to activity can elicit significant cost-savings and more importantly engagement in physical activity, particularly for the traditionally hardest to reach groups.

### 5.4 Physical activity as Medicine

Aim: Sheffield's healthcare system commissions, values and promotes physical activity as a viable treatment option

Objectives:

1. Physical activity as a treatment is valued and available in Sheffield
2. The benefits of physical activity in the treatment of non-communicable chronic disease are well understood by primary and secondary care clinicians and commissioners of healthcare services
3. Staff delivering physical activity as medicine are highly skilled and appropriately qualified and suitably valued
4. Commissioners embed outcomes related to physical activity in their service specifications
5. Physical activity is a core part of primary and secondary care health screening
6. Specific centres are designed and utilised that co-locate stakeholders to make it easier to deliver and evaluate the impact of physical activity as medicine.
7. Programmes delivering physical activity as medicine teach people the skills to implement physical activity into their daily lives as well as providing effective physical activity prescription.

#### Ambition 1: UK leading physical activity referral scheme

- Create a UK leading physical activity referral scheme and seek to embed primary and secondary care referral pathways within the scheme as well as extending it to community referral and self-referral.
- Linked to this provide commissioners with a simple 'how to evaluate' physical activity interventions manual and programme of training.
- Provide clinicians with a protocol for screening physical activity in primary and secondary care.

#### Ambition 2: Co-produced programme of training to outline the benefits of physical activity as medicine

- To co-produce and deliver a programme of training centred on physical activity behaviour change counselling and motivational interviewing to existing professionals and volunteers within the City (i.e. community health champions, health trainers, allied health professionals and within primary care).
- This training will focus not only on counselling skills and supporting individuals with physical activity planning but will also include raising awareness of where to signpost people into physical activity within their locality.

- The work with the Health Trainers and Community Health Champions would have a particular focus on creating well-trained community-based individuals who can provide support for people in terms of creating physical activity plans and goals as well as supporting them into physical activity opportunities, building participant self-worth and self-efficacy.
- Current interventions locally whereby Health trainers provide one to one motivational interviewing and goal setting and Community Health Champions provide more informal 'buddying' support, has been successful and work here will build on this knowledge.

### Ambition 3: Centres for physical activity as medicine

- Through the NCSEM Sheffield an innovative Hub and Spoke model will be established within the City to enhance existing physical activity and leisure facilities, create community facilities through which Sport and Exercise Medicine can bring benefit to traditionally hard to reach users and ultimately connect and co-locate patients, researchers, sport and exercise medicine specialists and public health professionals at community level.
- The Hub and Spoke model is likely to be integral to the delivery of some of the services and programmes that are outlined herein (i.e. community based exercise referral programmes, training of health practitioners and community health champions and the provision of physical activity in the community) but moreover, represents an opportunity to support the move of clinical services from secondary care into the community.
- To ensure the sustainability the services and programmes that will be delivered through the Hub and Spoke model will need to be aligned to existing health care provider strategies such as the clinical commissioning groups and the health and social care, children's and acute hospital trusts.
- With this in mind, a large focus of the work here is to provide the evidence to make a convincing case for healthcare leads to recycle any potential savings from our programmes back into well-being activities (see section 5.7.2 - robust data and evaluation).

### Ambition 4: Teach people the skills to implement physical activity into their daily lives

- Support individuals living with the plethora of conditions which can benefit from specific physical activity to regain functional wellbeing and autonomy through the development and application of a self-management programme (building on the current health trainers and health champions programmes, the Expert-Patient Programme and DESMOND) for long term conditions with a focus on mental health and MSK (we will seek to ensure that these LTC's match or compliment NHS commissioning strategies).
- This will be driven by best practice nationally as well as assessing locally developed programmes designed to meet the needs of at risk groups.
- The self-management approach promoted here will have a strong physical activity emphasis and will link and signpost participants to existing physical activity opportunities within the City and their locality, making use of the 'Move More on-line hub' where possible and appropriate.

## 5.5 Active Schools and Active pupils

Aim: Sheffield children are provided with a positive experience of physical activity through the physical, social and educational environment of the school as well as early years settings.

- Of all the available data on physical activity participation, trends are most worrying in children and young people.
- Therefore a key target for Move More is to increase the initiation, adoption and maintenance of physical activity behaviour amongst Sheffield's children and young people.

Objectives:

1. Enhance the quality and range of physical activity opportunities for children and young people (including early years) so that the offer is equal and inclusive across Sheffield.
2. All schools in Sheffield will have a 'whole of school programme' to promote physical activity by 2020.
3. Ensure that the whole of the school community is engaged in the development of physical activity as part of and outside of the curriculum.
4. Ensure the provision of physical activity for all children in Sheffield is high quality, fun, and confidence building.
5. Establish a clear picture of children and young people's physical literacy and participation in physical activity.

**Ambition 1: Implement whole of school approaches to physical activity**

- Develop and implement a 'whole of school' approach to the promotion of physical activity in all schools across Sheffield. This could also be extended to early years settings.
- 'Whole of school' means<sup>17</sup> prioritizing: regular, highly-active, physical education classes; providing suitable physical environments and resources to support structured and unstructured physical activity throughout the day (e.g., play and recreation before, during and after school); supporting walk/cycle-to school programmes and enabling all of these actions through supportive school policy and engaging staff, students, parents and the wider community.
- This programme of work will require input from a broad range of sectors and providers. The Move More network will be utilised to engage with those who can exert influence on the key aspects to the whole of school approach.
- As part of this whole of school approach the feasibility of the following campaigns and interventions should be explored:
  - Reduce the sedentary (sitting) time of children through the introduction of movement breaks (see [www.movementdynamics.com](http://www.movementdynamics.com)).
  - Build physical activity into the environment by re-organising the timetabling of lessons to increase distance walked.
  - Mass participation campaign encouraging walking to school across Sheffield (see [www.beatthestreet.me](http://www.beatthestreet.me)).
  - Extending the Sheffield Cycleboost scheme to children and families to promote cycling to school (see [www.sheffieldcycleboost.org](http://www.sheffieldcycleboost.org)).
- Importantly any campaigns should be evaluated against behaviour and attainment as well as levels of physical activity.

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<sup>17</sup> As outlined by the WHO (2011) in 'investments that work for physical activity'.



## Ambition 2: Develop an Innovation Academy to review the current provision of physical activity for children

- A recent publication from the American College of Sports Medicine, the International Council for Sport Science and Physical Education and Nike, Inc. (see [www.designedtomove.org](http://www.designedtomove.org)) outlined 7 core components of programmes that are known to inspire and enable children to participate in physical activity both in and out of school and that contribute to a child's positive development.
- The 7 core principles as outlined in designed to move are:
  1. **Universal Access:** Programmes that are effective for every child, including those who face the most barriers to participating in physical activity (e.g., girls, children with disabilities, minorities, those from low-income families) are likely to improve both the quality and experience for broader populations.
  2. **Age Appropriate:** Physical activities and tasks that are systematically designed for a child's physical, social and emotional development, as well as his or her physical and emotional safety, are a non-negotiable component of good programme design.
  3. **Dosage & Duration:** Maximum benefit for school-aged children and adolescents comes from group-based activity for at least 60 minutes per day that allows for increased mastery and skill level over time. A variety of physical activities, structured play sessions and sports should also be included.
  4. **Fun:** Create early positive experiences that keep kids coming back for more, and let them have a say in what "fun" actually is.
  5. **Incentives & Motivation:** Focus on the "personal best" versus winning or losing. Celebrate attendance, participation, and both individual and group effort and progress.
  6. **Feedback to Kids:** Successful programmes build group and individual goal-setting and feedback loops into programmes to let kids know they're on the right track.
  7. **Teaching, Coaching & Mentorship:** Teachers of physical education, coaches and mentors can make or break the experience for kids. They should be prepared through proper training and included in stakeholder conversations; and their work should be celebrated and honoured.
- With this in mind, the proposal is to audit and review the physical activity provision currently available for children (including early years) and young people across Sheffield against these 7 core principles.
- The tone and process for this review is crucial to its success as known from Move More consultation events, there is a significant amount of high quality provision already taking place within Sheffield.
- Therefore the notion of an Innovation Academy could be applied here made up of providers, commissioners, researchers and school representatives to ensure best practice (e.g. what works locally, best research evidence, NICE guidance) for physical activity is delivered across Sheffield.
- The Innovation academy could also look at the following:

1. Skills and confidence audit of teachers delivering school PE with follow-up co-produced training programme.
2. Engagement with the higher education sector to ensure the strategic deployment of student coaches and volunteers in the delivery of programmes for children and young people.
3. The links between schools (primary and secondary), community sports clubs and NGB's.

#### Ambition 3: Implement Junior parkrun in Sheffield

- The parkrun (see [www.parkrun.org.uk](http://www.parkrun.org.uk)) events for adults have had significant success across the UK and particularly in Sheffield. Indeed, Sheffield now has more parkrun events than any other city outside London.
- With this in mind a pilot of Junior parkrun in Sheffield is proposed.
- It will be essential that this programme has good links with the schools and local clubs and that communities are engaged via the asset based community development approach to support these events.

#### Ambition 4: Utilise school facilities to enhance places for community-based physical activity

- Safe and accessible places to be physically active are an important part of creating a physical activity culture.
- Move More consultation events have highlighted school-based facilities as a source of untapped community asset and so the proposal is to explore a programme of work to release these assets to enhance the physical activity opportunities in Sheffield.
- Sport England have identified 'Accessing Schools' as a key programme of work and it will be the intention here to partner with Sport England in this programme of work.

#### Ambition 5: Develop an robust data driven picture of physical activity in children and young people

- The intelligence locally regarding the participation of children and young people in physical activity is poor.
- Furthermore, whilst data is available at school level on overweight and obesity, very little is known about their physical fitness – a more important measure of long-term health and wellbeing.
- With these points in mind work is proposed to engage with schools, providers and key stakeholders such as sport and exercise scientists to develop a mechanism to consistently and reliably assess young people's physical activity, physical fitness and physical literacy across Sheffield.
- One option for this is to link with the current overweight and obesity screening (NCMP) that occurs at reception and year 6 but a fuller exploration of this is required.
- Importantly, as well as any assessment being reliable and valid it must also be simple to administer and represent a positive experience for our children and young people.

- The availability of reliable and valid data on physical activity, physical fitness and the physical literacy of children and young people in Sheffield will be crucial to the targeting of interventions and the shaping and evaluation of physical activity provision.

## 5.6 Active Workplaces and an Active Workforce

Aim: Sheffield employers create workplace environments and policies, and provide support, to enable employees (and those seeking work) to move more as part of their working day to improve health and create wealth.

- This theme focuses on the role workplaces play in the promotion of healthy living at an individual, group, community and population level in a wide range of settings across the City.
- It is prefaced by the evidence from the British Heart Foundation National Centre for Physical Activity and Health (2010) which states that physically active employees take 27% fewer days' sick than non-active employees and individual work performance can be improved by between 4% and 15% when people engage in regular physical activity.
- Reducing the loss of revenue from absenteeism and presenteeism (in work but low productivity due to poor health) to workplaces will be a major driving force regarding the success and uptake of initiatives promoted through this theme of work.

Objectives:

1. Demonstrate a return on investment from policies and strategies that promote physical activity in the workplace
2. Use physical activity as a strategy to support people back in to work
3. Reduce sedentary time within the workplace
4. Provide support to individuals within work to increase their physical activity and improve their health and wellbeing by providing evidence-based workplace wellbeing programmes.

### Ambition 1: Create a high quality digital hub for workplace physical activity promotion

- The development of a workforce specific section within the Move More on-line hub (see Outcome 3) to promote workplace physical activity is a core part of the Move More plan.
- Providing high quality and immediate access to written information, videos, testimonies and case studies from the workplace as well as online training programmes, challenges and signposting to physical activity opportunities within the city is much needed.
- The workplace section of the Move More hub will outline the key benefits of investing in workforce health such as robust information on return of investment as well helping to support employees to make plans to be active, help relapse prevention through evidence based strategies and provide access to contact with professional support within the city via the potential for self-referral to city-wide schemes.
- As part of the workforce section of the on-line hub a resources kit could be developed to help workplaces publicise physical activity, implement their own workplace interventions (such as improving stair wells, using positive health messages and images at point of decisions) and link to city-wide initiatives.

- The vision is for this to include printed items such as posters, sign-up sheets and also digital elements. The resource kit should be available as customisable online templates that can be printed locally within the workplace to include specific company programme details, contact people and branding but importantly be connected by the Move More brand.

#### Ambition 2: Establish a workforce innovation academy to implement best practice

- Explore the potential of extending the 'Innovation Academy' idea (a multi-agency working group) to connect key stakeholders across the city that influence policy and delivery decisions affecting physical activity in the workplace.
- It is proposed that the Innovation Academy would be responsible for:
  - a) Facilitating the implementation of NICE guidance on promoting physical activity in the workplace (PH13, PH22) across city stakeholders.
  - b) Developing a programme of work to review and replace cues from the physical and social environment within the workplace that re-enforce the message that physical activity is not important. For example; no safe cycle storage or changing facilities.
  - c) Developing and delivering group educational and leadership workshops for senior managers across the City and from different organisations to ensure 'buy-in' and to encourage leaders to own the bottom-line benefits of promoting an active workforce – starting with Move More stakeholders.

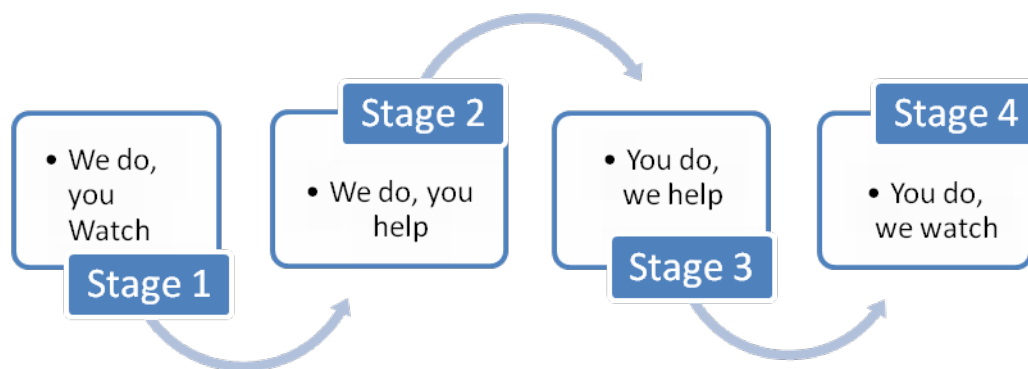
#### Ambition 3: City-wide mass media workforce campaigns

- Explore the feasibility of implementing city-wide mass media campaigns to promote physical activity in the workforce including:
  - Reduce the sedentary (sitting) time of employees through the introduction of movement breaks.
  - Build physical activity into the environment by introducing sit-to-stand desks.
  - Mass participation campaign encouraging active travel to work.

#### Ambition 4: Wellness screening and behaviour change counselling

- In partnership with the NCSEM and community sector deliverers a programme of 1-to-1 Wellness screening and behaviour change counselling is proposed for employees and also those seeking work across Sheffield.
- This would enable individuals to have the opportunity to attend a lifestyle and health screening session that would provide information about current health status (i.e. Blood pressure, cholesterol, aerobic fitness, and physical activity and nutrition).
- On the basis of this information, individuals could be supported in making action plans and setting goals that essentially focus on helping them to think well, eat well, and move more to improve their current health status.
- Individuals accessing this programme would also be signposted to the Move More on-line hub to receive high quality information and support.
- Importantly, a skill legacy within our workplaces and workforces is proposed so that the delivery of workplace wellbeing programmes is sustainable. To achieve this a recipient to champion model will be used which is outlined below:

### Recipient to champion model



#### Stage 1:

- Workplace is keen to be involved but unsure of benefits or lack skills/knowledge of workforce wellness
- Move More network provides clear direction, skills and funded delivery input.

#### Stage 2:

- Workplaces have been involved for a short period with potentially some small benefit shown. However, business also begins to realise the time, effort and commitment required and there is potential here for them to become disengaged
- Move More network acts as a coach during this phase to support the workplace through these challenges

#### Stage 3:

- Workplaces begin to grow in confidence and skill in terms of delivery and enactment and the evidence in terms of improved workforce health and return of investment are growing
- Move More network acts as a logical sounding board for sustainability of interventions and programmes within the workforce and asks workplaces to consider match-funding of programmes

#### Stage 4:

- Workplaces are confident and competent and own the benefits of workplace wellbeing interventions.
- Move More network provides little direction or exerts little control but supports in terms of evaluation and pairs 'established workforce champion' with new keen workplace and the process is repeated.

## 5.7 Two 'must have's'.

- To support the delivery of the programmes of work outlined above, two 'must have's' have been identified.
- These are 1) a resourced and co-ordinated approach and 2) robust data and evaluation.

### 5.7.1 Resourced and co-ordinated approach

- The overarching aim of this 'must have' is to ensure a resourced and co-ordinated city-wide approach to physical activity.
- This will be achieved via the following:
  - Establishing a connected and co-ordinated information governance structure for physical activity within the city that is owned by the Health and Wellbeing Board and has strong links to commissioners.
  - Resourcing the Move More brand and associated activities outlined herein via sponsorship, re-allocation of existing resource, generating match and volunteer time and securing local, national and international research funding.
  - Making the city accountable to this agenda by embedding physical activity within the outcomes framework of the Health & Wellbeing strategy.
  - Establishing Move More brand guidelines.
  - Developing a communications agreement between partners as regards physical activity and specifically Move More.

### 5.7.2 Robust data and evaluation

- One clear message from evidence reviews undertaken as part of the writing of this Move More plan is that any programmes should be rigorously designed and evaluated. Furthermore that measures of physical activity used to evaluate any programmes of work are reliable and sensitive to change at a population level.
- This will be achieved via the following:
  - Developing a mechanism/protocol for capturing physical activity data at population which is likely to include; routinely captured data from national and local surveys (APS and HSE), data capture from primary and secondary care, workplace initiatives, school initiatives as well as mass participation events.
  - Seeking alternatives to self-report telephone or paper-based surveys.
  - Utilising existing city-wide databases such as the Lifecard.
  - Making the best use of innovative technology to capture data.
  - Establishing an economic model to demonstrate cost-effectiveness (cost to save) benefits of our work to the NHS, to business and to other commissioners so to make the case for commissioning physical activity.
  - Developing programmes of research that help better understand how to increase physical activity across the lifespan and at a population level.
  - Broadcasting learning and success.
  - Building capacity by providing training in research and evaluation.

## 6.0 Why will this work in Sheffield?

- Sheffield is in an extremely strong position to utilise the Move More plan as a vehicle for speeding up and deepening its long term commitment to improving the health of its population and the quality of the environment in which they live.
- Sheffield has long held ambitions to be a leader in the WHO Healthy City network and as a City of Physical Activity (see previous physical activity strategy 'City on the Move').
- Sheffield has a major public health programme in both primary care and local authority settings, along with a thriving voluntary sector, with a special emphasis on engaging the most disadvantaged groups through the Healthy Communities Programme.
- In addition it has made significant investment in activity-related facilities with the development of the English Institute of Sport and the forming of the Sheffield International Venues forum.
- There are also exciting and extensive plans to redevelop the Don Valley stadium site and Move More will be keen to work with city partners to ensure that opportunities to build physical activity into the culture of that site are fully realised.
- Sheffield is also one of 3 partners to be awarded the Olympic Legacy programme, The National Centre for Sport and Exercise Medicine (NCSEM). The NCSEM is part of a broader attempt to leverage a participation culture post Games and as such it brings global interest to our work here.
- Sheffield also a longstanding commitment on the part of the local NHS and the Local Authority in Sheffield not just to health improvement but to the reduction of health inequalities.
- There is a significant track record of joint working between the public, private and third sector on health and physical activity related programmes and multi-agency working in sport and health on the public health agenda locally, nationally and internationally.

*'Effective solutions for increasing physical activity need the engagement of a wide range of agencies - All will need to work in a coordinated and comprehensive way to influence the way we live'. (DH, 2004)*

- Sheffield has a long history of co-ordinated public health work on obesity, physical activity and food supported by strong partnerships between the NHS, Sheffield City Council, the two City Universities, private and voluntary sector service providers.
- Sheffield has on-going world class research and professional training programmes in health, wellbeing and physical activity across its two Universities. It has state of the art, research based, medical programmes in physical activity and health and associated specialities in the Sheffield Teaching Hospital Foundation Trust, Sheffield Health & Social Care Foundation Trust and the Sheffield Children's Hospital Foundation Trust.

## 7.0 Implementation of the Move More plan

- A significant programme of work has been outlined herein which aims to provide direction for investment in physical activity over the next 5 years.
- For the vision to be realised the following recommendations are made in terms of implementing the Move More plan:
  1. A commitment of resource is made with powers of autonomy for investment given to the Move More board.
  2. Investment is made in a full-time Move More officer (this could be an existing role within a Move More partner organisation such as the public health lead for physical activity or a new role), with admin support, to lead the implementation of the Move More plan. The first task of the Move More officer would be to agree with the Move More board the priorities for implementation of the ambitions outlined herein and to seek and secure investment.
  3. A lead person is identified from the Move More board for each of the outcomes identified within the plan. It would be the role of the outcome lead to maintain oversight of the ambitions connected to that outcome on behalf of the Move More Board and report on progress quarterly.
  4. Progress against the key outcomes identified within the Move More plan should be presented annually in the form of a written report to the Food and Physical Activity Board. The annual report should also be translated into a public facing communication to broadcast progress and champion success.
  5. An annual celebration event is held to promote the success of the work within the Move More plan and to honour and celebrate the work of the Move More ambassadors in changing the way we do things around here in terms of physical activity.



## Appendix 1.0 The importance of physical activity for health, wealth and wellbeing.

### Benefits of regular physical activity

- Physical activity, performed on a regular basis, is associated with significant positive physical and mental health benefits across the lifespan (O'Donovan et al., 2010).
- Physical activity plays an important role in the prevention of various chronic diseases, such as cardiovascular disease, ischemic stroke, hypertension, obesity, diabetes mellitus, osteoporosis, colon cancers and fall-related injuries (WHO, 2010).
- Physically active men and women of all ages, socioeconomic groups, and ethnicities are happier, healthier and more productive compared to sedentary peers.
- There are also numerous protective and beneficial effects of an active lifestyle for older and younger people respectively as well as wider benefits to society (see table 1.0).
- Physical activity can also help to save money, improve the physical (reduced congestion and pollution via active travel) and social (reduced anti-social and criminal behaviour) environment we live in and help to ease the burden of chronic disease on the health and social care services.
- Reducing the burden of physical inactivity is critical given that it costs the NHS £1.1billion (Allender et al., 2007) with the wider costs to society and the economy approximately £8.2billion per year (Department of Culture, Media and Sports, 2002).

### Physical activity recommendations for children, adults & older adults

- The most recent physical activity guidelines for children, young people, adults and older adults were presented in the Department of Health report: Start Active, Stay Active (2011).
- A comprehensive presentation of these guidelines, including factsheets by age group, can be found on the British Heart Foundation Website: <http://www.bhfactive.org.uk/homepage-latest-news-item/75/index.html>
- Briefly here; the Chief Medical Officers from the four home countries advise that adults (19-64 years) and older adults (65+) should aim to be active daily and to try and accrue at least 150 minutes of moderate intensity activity per week - in bouts of 10 minutes or more (Department of Health, 2011).
- One option for achieving this is via 30 minutes of activity on at least 5 days a week but for those who are relatively inactive, their activity levels should be increased gradually towards this target.
- Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or combinations of moderate and vigorous intensity activity. Again, gradual increases towards this target are recommended for those who are currently inactive.
- Adults and older adults should also undertake physical activity to improve muscle strength on at least two days a week and older adults at risk of falls should incorporate physical activity to improve balance and co-ordination on at least two days per week.
- For all adults (19+) the amount of time spent being sedentary (sitting) for extended periods should be minimised.

Table 1.0 Benefits of physical activity<sup>18</sup>

	Health	Social	Environment	Economy
Increases	Fitness, stamina and energy	Active and vibrant community hubs	Uptake of active transport, walk-ability and economic viability of local areas	Tourism
	Lean muscle, muscle strength and bone density	Improved communication, team building, leadership and cooperation skills	Influences the development of well planned and designed spaces	Retail
	Flexibility, coordination, balance and development of a wide range of motor skills	Social capital, community connections and volunteering		Business and employment opportunities
	Improved immune system	Independent living		Investment opportunities
	Healthy ageing, mobility, independence and quality of life in	Community participation in recreational and social activities		Productivity and growth
Reduces	Risk of coronary heart disease, cardiovascular disease, stroke, diabetes, high cholesterol, high blood pressure and some cancers	Social isolation and loneliness	Traffic congestion, air and noise pollution	Presenteeism
	Chronic illness, disability, mortality rates and risk of dying prematurely	Antisocial behaviour	Use of fossil fuels and energy use	Absenteeism
	Risk of developing dementia, postnatal depression, osteoporosis and symptoms of arthritis	Feelings of depression, stress and anxiety	Greenhouse gas emissions, global warming and climate change impacts	Health care costs
	Falls and injuries in older people		Demand for major road infrastructure (roads, car parks)	
Supports	Improved sleep, mood, quality of life, sense of wellbeing and long term health	Stronger, connected communities with greater cohesion and capacity building	Incidental activity	Local business
	Weight management	Community inclusion and public enjoyment	Community safety and connectivity	Attracts workforce
	Cognitive functioning, memory, learning and better performance at school	Crime prevention	Improved public access and linkages to neighbourhoods and key activity centres	Active and healthy employees and workplaces

<sup>18</sup> Adapted from <http://www.beactive.wa.gov.au/index.php?id=483>

- All children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and preferably up to several hours every day.
- Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated at least three days a week.
- All children and young people should also minimise the amount of time spent being sedentary (sitting) for extended periods.
- Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day<sup>19</sup> - those not yet walking should be encouraged to be active, particularly through floor-based play and water-based activities in safe environments.
- Regardless of age, increasing the volume of physical activity is beneficial for all whether sedentary, relatively inactive, or more active.

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<sup>19</sup> Most UK pre-school children currently spend 120–150 minutes a day in physical activity, so achieving this guideline would mean adding another 30–60 minutes per day.

## Appendix 2.0 Current prevalence of physical activity in the UK

### Adult participation (19-64 years) in physical activity

- A comprehensive review of physical activity behaviour in the UK for adults and child can be accessed here:  
<http://www.hscic.gov.uk/searchcatalogue?q=title%3A%22Health+Survey+for+England%22&area=&size=10&sort=Relevance>
- The following section offers brief summary of the data.
- Over the past two decades the prevalence of physical activity in England at recommended levels has been low, albeit steadily increasing.
- According the Health Survey for England data in 1997, 32% of men and 21% of women met the recommendations, this increased to 43% and 32% respectively in 2012.
- These data were based on the recommendation that adults aged 16 and over should achieve at least 30 minutes of physical activity per day of at least moderate intensity, on at least five days per week.
- A cohort study using objective measures of physical activity against the same recommendation suggested that only 6% of men and 4% of women were sufficiently active to be of benefit to their health (NHS Information Centre for Health and Social Care, 2009) raising significant concern about a) the true picture of physical activity behaviour in the UK and b) the reliability of the available self-reported data.
- A similar picture could be found in the Active People Survey (APS). The APS provides statistics on participation for all 354 local authorities in England and can be used to identify variations in participation via location and between different population groups. A fuller explanation of APS is available here: <http://www.sportengland.org/research/about-our-research/active-people-survey/>
- One aspect of the APS assesses the percentage of adults who meet the NI18 target of participating in sport and active recreation equivalent to 30 minutes on 3 or more days a week.
- Data here suggested that in 2012 only 22.7% of adults achieved this target.
- Sport England also publish data based on 1 x 30minutes of sports participation. Latest national data (2013) suggests that only 35.7% of adults meet this target.
- As mentioned in appendix 1.0, in 2011 the physical activity guidelines for physical activity were updated.
- This was a result of an evidence review from the British Association of Sport and Exercise Science (2007) which argued that the overall volume of physical activity was more important than the specific type or frequency of session (see O'Donovan et al., 2010).
- The Health Survey for England (HSE) and the APS have been updated to reflect the change in guidance and the latest data (2012/13) published.
- Based on self-reported data the HSE in 2012 suggest that 67% of men and 55% of women aged 16 years and over met the new guidelines (150 minutes per week). The APS 7, which for the first

time included a question based on 150 minutes, found similar levels of participation with 56% of adults meeting the new guidelines.

- However, when the same HSE 2012 cohort was assessed using the old guidelines (5week x 30minutes per day) only 43% men and 32% women met the threshold.
- According to the Health and Social Care Information Centre (2013), there are two potential reasons for this stark difference in the reporting of physical activity prevalence.
  1. Previous HSE data has underestimated physical activity due to only including activity that was undertaken for at least 30 minutes in a single episode. Multiple bouts of physical activity of at least 10 minutes potentially undertaken on the same day to accrue the 30 minute daily minimum were not included.
  2. The new guidelines are easier to accomplish over a seven day period with at least 30 minutes per day of moderate activity on at least five days a week now only one way of achieving 150 minutes spread throughout the week.
- Despite the change in guidance which seems to have brought with it greater scope for people to meet the recommended levels of physical activity clear inequalities remain.
- The proportion of participants meeting the current UK guidelines for aerobic activity increased as household income increased - 76% of men and 63% of women in the highest income quintile compared to 55% of men and 47% of women in the lowest quintile.
- Data also highlighted a clear association between meeting the guidelines for aerobic activity and body mass index (BMI) category with 75% of men who were not overweight or obese meeting the guidelines, compared with 71% of overweight men and 59% of obese men. The equivalent figures for women were 64%, 58% and 48%, respectively.
- In addition to aerobic activity, current UK guidelines also recommend that adults aged 19 and over should undertake muscle-strengthening activities on at least two days per week to increase bone strength and muscular fitness. 34% of men and 24% of women aged 16 or over met this guideline.
- Overall 49% of men and 56% of women did no muscle-strengthening activity in the last four weeks, with a sharp decline in this type of activity as age increased.
- Among adults aged 16 and over, more men (33%) than women (23%) met both the aerobic and muscle-strengthening guidelines for physical activity.
- Interestingly, very few participants (1% of men, 2% of women) met only the recommendations for muscle strengthening and a third of men and women (34% and 33%, respectively) met only the guidelines for aerobic activity.

#### Older adult (65+ years) participation in physical activity

- The proportion of older participants who met the guideline increased as levels of aerobic activity increased. 31% of men who met the guidelines for aerobic activity spent at least two days a week in exercises that improve balance/co-ordination, compared with 9% of men with low/some levels of aerobic activity and 3% of men classed as inactive. The equivalent figures for women were 22%, 10% and 2% respectively.

### Children and young people's participation in physical activity

- In 2012 a total of 21% boys and 16% girls aged 5-15 were classified as meeting current guidelines for children and young people of at least one hour of moderately intensive physical activity per day. This represents a marked decrease compared to 2008 data which reported 28% of boys and 19% of girls meeting the target.
- The proportion of children (boys and girls) meeting guidelines also reduced with age with 24% boys aged 5-7 compared to 14% aged 13-15 achieving at least an hour a day. Among girls the decrease was from 23% to 8% respectively.
- These data exclude active travel to/from school, time being active during breaks at school, and formal PE lessons at school.
- With this in mind, two thirds of children who had attended school in the last week had walked to or from school on at least one occasion (64% of boys and 67% of girls). 41% of boys and 44% of girls walked to/from school every day. On average, children spent 1.1 hours walking to/from school in the last week. More boys than girls cycled to/from school on at least one occasion in the last week (6% and 1% respectively).
- Considering physical activity on a weekly rather than daily basis (i.e. at least seven hours of activity in the last week) corresponded to a large rise in participation with 51% of boys and 45% of girls aged 5-15 satisfying the criteria.
- For pre-school children (aged 2-4) only 9% of boys and 10% of girls were classified as meeting the current guidelines for children under 5 of at least three hours of physical activity per day.
- The gap between the proportion of children meeting the recommendations aged 2-4 and 5-7 can largely be explained by the reduction in the recommendations from three hours to one hour daily and thus being easier to meet. In addition, for pre-school aged children the greater the proportion of activity is normally undertaken through 'informal play', which is very difficult to assess by questionnaires such as HSE.
- Taken collectively the data here describes a very concerning picture of the physical activity behaviour of young people in the UK.

### Sedentary behaviour across the lifespan

- Current UK guidelines recommend that individuals across the lifespan should minimise the amount of time spent being sedentary for extended periods.
- According to HSE 2012 data, 31% men and 29% women spend an average of six or more hours of total sedentary time on weekdays with that figure increasing at weekends (40% and 35% respectively).
- Among women, the proportion averaging more than four hours of sedentary time on both weekdays and weekend days increased as BMI category increased. Among men, sedentary time per weekday was significantly higher in participants who were obese compared to normal weight counterparts.
- In children, HSE 2012 data revealed the average total sedentary time (excluding time at school) during weekdays was 3.3 hours per day for boys and 3.2 hours for girls. On weekend days this increased to 4.2 hours and 4.0 hours respectively.

- Perhaps most worryingly, the proportion who spent six or more hours being sedentary increased steadily with age, ranging from 10% of boys and 9% of girls aged 2-4 to 43% of boys and 37% of girls aged 13-15.
- The average time per day spent watching TV on weekdays also increased steadily with age in boys (from 1.5 hours for those aged 2-4 to 1.8 hours for those aged 13-15) and girls (1.5 to 2.2 hours).
- For both boys and girls, the average number of hours spent watching TV on both weekdays and weekend days increased as household income decreased.

## Appendix 3.0 The local context of the Move More plan

### A snapshot of physical activity in Sheffield

- The majority of available data describing the physical activity status of Sheffield is provided by the previously mentioned Sport England Active Peoples Survey (APS).
- According to APS 7 data (2013), adult participation in sport and active recreation (NI18)<sup>20</sup> in Sheffield stands at 24.3%. This represents a 5.5% increase from the 2005/6 data (18.8%).
- National data is no longer available for NI18 as the target changed to an indicator based on 1 x 30minutes of sports participation but based on this new metric Sheffield (42.9%) is above national (35.7%) and regional (Yorkshire) (36.2%) averages and has seen an increase of 9.9% since the APS survey started in 2005 (33%).
- In 2013 Sport England also introduced a measure of physical activity that considers the percentage of individuals who meet the Chief Medical Officer's recommended guidelines on physical activity (at least 150 minutes a week), and the percentage of individuals who are inactive (less than 30 minutes a week)<sup>21</sup>.
- The activities included are: sport, recreational cycling, recreational walking, walking for active travel purposes, cycling for active travel purposes, dance and gardening. Occupational activity or work in the home is not included.
- The data is segregated into four categories: less than 30 minutes, 30-89 minutes, 90-149 minutes and 150+ minutes as a weekly average.
- In Sheffield, 30.4%, 8.8%, 6.2% and 54.6% self reported their activity according to these four categories.
- Nationally, 28.5% of adults reported doing less than 30-minutes of moderate intensity physical activity per week and 56.0% of adults suggest they meet the recommendations. Regionally data for each of the categories is as follows: 32.1%, 7.6%, 7.3% and 53.0%.
- The highest reported percentage of adults meeting the recommendations in a single authority was seen in Windsor and Maidenhead (68.5%).
- Table 2.0 presents the physical activity data for the Core Cities with raw APS 7 data found elsewhere - <http://www.noo.org.uk/gsf.php5?f=12959>

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<sup>20</sup> Data represents the percentage of the adult (age 16 and over) population who participate in sport and active recreation, at moderate intensity, for at least 30 minutes on at least 12 days out of the last 4 weeks (equivalent to 30 minutes on 3 or more days a week) – NI18.

<sup>21</sup> It is not possible to compare 150minute APS data with previous NI18 APS data due to differences in methodology.



Table 2.0 Core Cities APS physical activity data in minutes per week

Core City	<30 mins	30-89 mins	90-149 mins	150+ mins
National	28.5%	8.1%	7.3%	56.0%
Sheffield	30.4%	8.8%	6.2%	54.6%
Birmingham	34.3%	9.9%	8.9%	46.9%
Bristol	28.4%	8.4%	7.8%	55.4%
Leeds	26.9%	6.4%	5.5%	61.3%
Liverpool	31.6%	6.8%	9.6%	52.0%
Manchester	40.2%	5.4%	2.8%	51.6%
Newcastle upon Tyne	25.6%	9.1%	7.6%	57.6%
Nottingham	33.2%	7.9%	7.0%	51.9%

- Whilst these APS results appear encouraging, with Sheffield seeing a significant increase in self reported participation in sport and active recreation and placing 4<sup>th</sup> out of the 8 core cities against the CMO's 150minute target, real caution should be expressed regarding the robustness of these data due to the inherent bias of self-report<sup>22</sup> and the limited local area sample sizes of the survey (n=461).
- The major point to make here then, is that the availability and robustness of data outlining the physical activity status of Sheffield is very poor. Even the most recent (2013) Joint Service Needs Assessment (see here <https://www.sheffield.gov.uk/dms/scc/management/corporate-communications/documents/social-care-health/public-health/JSNA-2013-Report/JSNA%202013%20Report.pdf>) offers very little insight into the physical activity behaviour of Sheffield residents.
- There is an urgent need to enhance the quality, coverage and robustness of data pertaining to physical activity across Sheffield.

<sup>22</sup> The APS 150minute survey uses a 28-day reference period to record the number of minutes of physical activity (of at least 10 minutes) and then divides the number of minutes by four to come up with a weekly average (e.g. 2 hours of physical activity over the 28 days equates to 30 minutes per week).

## Population and health indices

- Sheffield has a population of approx. 555,500, the majority of whom reside in a densely populated urban core with suburban and sparsely populated wards predominantly located to the west and northwest of the City centre.
- Sheffield is ethnically diverse with approximately 17% of its population from a black or minority ethnic group, the largest of these is Pakistani.
- Sheffield's population is increasing year on year, largely as a result of a positive 'natural change' (i.e. more births than deaths) and increased international migration.
- The City's age profile is also changing with people living longer, increases in birth rates raising school population sizes and in-migration increasing the size of the younger working age population. Unsurprisingly, Sheffield's age profile also bulges in the 20-24 age group due to the City's significant student population.
- Over the lifetime of the current Move More plan the overall number of people in Sheffield is projected to rise by 18,800 (3.5%). This increase will predominantly occur in those aged 0-15 years, 25-34 years and those over 65 years which will have implications for the targeting of interventions to promote physical activity.
- The 2010 *Indices of Multiple Deprivation* (IMD) data identified Sheffield as the 56th most deprived local authority in England (out of 326) with 48 separate individual city geographies in the 5% most deprived (nationally).
- In terms of Health indicators, the 2010 Health Profiles from the Department of Health (data for adults - 2006/08, data for children - 2009/10) suggested that in Sheffield the rate of adult obesity (25.9%), and childhood obesity (19.6%) were both above national averages.
- Life expectancy is at least one year lower for both men (77.2) and women (81.3) than England averages and the health costs of physical inactivity amount to almost £28 million across the Sheffield City region.

## Appendix 4.0 What works in terms of physical activity intervention?

### Interventions to promote physical activity

- Traditionally approaches to increase physical activity can be categorised into three main areas (based on Kahn et al., 2002):
  - informational approaches
  - environmental and policy approaches
  - behavioural and social approaches
- A brief description of each is presented below.

### Informational approaches

- Informational approaches are designed to increase physical activity by providing information necessary to motivate and enable people to change their behaviour, as well as to maintain that change over time.
- The interventions use primarily educational approaches to present both general health information, including information about cardiovascular disease prevention and risk reduction, as well as specific information about physical activity and exercise.
- Informational approaches aim to:
  - Change knowledge about physical activity benefits
  - Increase awareness of how to increase physical activity in the community
  - Explain how to overcome barriers and negative attitudes about physical activity
  - Increase taking part in community-based activities

### Behavioural and social approaches

- Behavioural and social approaches focus on increasing physical activity by teaching widely applicable behavioural management skills and by structuring the social environment to provide support for people trying to initiate or maintain behaviour change.
- Interventions often involve individual or group behavioural counselling and typically include the friends or family members that constitute an individual's social environment.
- Skills focus on recognising cues and opportunities for physical activity, ways to manage high-risk situations, and ways to maintain behaviour and prevent relapse.
- Interventions also involve making changes in the home, family, school, and work environments.

### Environmental and policy approaches

- Environmental and policy approaches are designed to provide environmental opportunities, support, and cues to help people develop healthier behaviours.
- The creation of healthful physical and organisational environments is attempted through development of policy that lends itself to creating supportive environments and strengthening community action.
- To affect entire populations, interventions in this category are not directed to individuals but rather to physical and organisational structures.

- The goal is to increase physical activity through changing social networks, organisational norms and policies, the physical environment, resources and facilities, and laws.

### Effectiveness of interventions to promote physical activity

- Over the past decade the literature evidencing the promotion of physical activity, particularly in adults, has grown exponentially. Whilst interventions vary in terms of quality and design, with a fairly limited picture in terms of 'what works' at a population level, there are some promising approaches emerging. These include:
  - Social marketing through local mass media (television (TV), radio, newspaper).
  - Other communication strategies (posters, flyers, information booklets, web sites, maps) to raise awareness and provide specific information to individuals in the community.
  - Individual counselling by health professionals (both publicly and privately funded), such as the use of physical activity prescriptions.
  - Working with voluntary, government, and non-government organisations, including sporting clubs, to encourage participation in walking, cycling, other sporting activities, and events.
  - Working within specific settings such as schools, workplaces, aged care centres, community centres, homeless shelters, and shopping centres. This might include settings that provide an opportunity to reach disadvantaged groups.
  - Environmental change strategies such as creation of walking trails and infrastructure with legislative, fiscal, policy requirements and planning (having ecological validity) for the broader population.
  - What is interesting is that the majority of research has focused on increasing individual level physical activity which perhaps demonstrates the inverse evidence law in which there is the least amount of evidence for the approaches that have the greatest potential.
  - What is known via previous NICE evidence reviews (Hillsdon et al., 2005; Foster & Cavill. 2009) is that whilst short term changes in physical activity might be achievable, long term change (represented by maintained physical activity participation) and at a population level is much more difficult to achieve.
  - A recent publication from the WHO (2011) outlines what it calls 'the best investments for physical activity'. The full report can be accessed here:  
<http://www.globalpa.org.uk/pdf/investments-work.pdf>
  - WHO suggests the following 7 programmes should be considered to increase physical activity on a population level:
    1. Whole of school programmes
    2. Transport policies and systems that promote walking, cycling and public transport
    3. Urban design regulations and infrastructure that provide for equitable and safe access for recreational physical activity, and recreational and transport related walking and cycling across the life course
    4. Public education, including mass media to raise awareness and change social norms on physical activity
    5. Physical activity and NCD programmes integrated into primary health care systems
    6. Community-wide programmes involving multiple settings and sectors and that mobilise and integrate community engagement and resources

#### 7. Sports systems and programmes that promote 'sport-for-all' and encourage participation across the lifespan.

- Although many of the approaches outlined above have been tested in isolation, few population-based programmes have considered/delivered them concurrently (Kahn et al., 2002).
- In light of the Advocacy Council of the International Society for Physical Activity and Health confirming that no single solution to increasing physical activity exists (2011), multi-component and concurrent interventions are therefore required.
- Indeed, a further WHO publication on 'what works' for physical activity (2009) suggested that multi-component interventions that are adapted to the local context, that use the existing social structures of a community and involve participants in the planning and implementation stages of the intervention represent the most effective option.
- Therefore, using whole systems approaches (an approach that considers all age groups and socio-demographics within the City) that combine informational approaches, environmental and policy approaches and behavioural and social approaches and importantly consider an individual's values as well as their apparent need for physical activity should be the focus for any attempt to elicit a significant shift in participation.

#### Why a value-based approach?

- The promotion of physical activity at an individual level has tended to adopt a 'stage matched' model (Adams & White, 2005). This means they are designed to be matched to the current motivation and/or engagement of different target groups (e.g. contemplation, preparation, etc).
- However, previous research suggests that people possess a set of underlying core values (e.g. Braithwaite & Law, 1985; Rohan, 2000; Rokeach, 1973; Schwartz, 1992) and these values, are strongly linked to behavioural actions (Anshel, 2005).
- The research evidence highlighting the barriers to physical activity and social and environmental correlates (e.g. Blanchard et al., 2005; Giles-Corti, Timperio, Bull & Pikora, 2005) also seems to suggest that personal & situational factors (i.e. values) are extremely important in the adoption and maintenance of physical activity behaviour.
- A previous call has been made to consider peoples values as a foundation for future interventions (Anshel, 2005) with the ideal being that a person's values relate positively with their physical activity behaviour.
- However, when actual behaviour is not consistent with core values negative habits such as exercise cessation can occur.
- To ensure long-term physical activity behaviour, there appears a need to consider values in the design of programmes aimed to increase physical activity.

#### Cost-effectiveness of physical activity interventions

- Evidence to support the cost benefit of physical activity interventions is abundant (e.g., Dalziel et al., 2006; Garrett et al., 2011; Reimenschneider et al., 2008; Roux et al., 2008).
- For example, Garrett et al. (2011) conducted a systematic review of the cost effectiveness of physical activity interventions in primary healthcare and the community, reporting a cost per QALY gained for moving one person from inactive to active over a 12 month period of €331 to €3673.

- Roux et al. (2008) provides support for the effectiveness of community interventions, reporting cost effectiveness ratios of \$14000 to \$69000 per QALY gained.
- Strong evidence is also reported for physical activity interventions in the workplace, with workplace health promotion programmes estimated to have a return of two to eight times the initial investment (Price Waterhouse Cooper, 2008). For example, a workplace walking intervention costing £57,000 saved £484,944 in NHS net costs (Purath et al., 2004).
- The British Heart Foundation National Centre for Physical Activity and Health (2010) also states that physically active employees' take 27% fewer days sick than non-active employees and individual work performance can be improved by between 4% and 15% when people engage in regular physical activity.
- Indeed, if 70% of UK adults met the recommendations for exercise (150 minutes+ a week) it would save business £487 million by preventing 2.7 million days of work absence per year (Deloitte and TARP, 2006).

*'Funding sources should favour physical activity interventions over pharmaceutical interventions as they are more cost effective'. Garrett et al., (2011)*

- In the UK, the Public Health Observatory reported that interventions promoting a physically active environment were cost effective, outweighing the implementation cost up to 11 times.
- Media campaigns were also reported to be cost effective, with a BBC mass media intervention demonstrating changes in adults' physical activity by 17% (Lewis et al., 2010).
- There is clear and overwhelming evidence for investment in the promotion of physical activity.



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